# 2. Brain Teasers

**Optical Illusions** - Examples below are from NIEHS Kids' Pages - http://kids.niehs.nih.gov/illusion/illusions.htm

NIEHS Kids' Pages are supported by the NIEHS Office of Communications and Public Liaison, PO Box 12233, NH-10, Research Triangle Park, North Carolina 27709. Telephone: (919) 541-3345. The NIEHS Kids' Pages are a Federal Government creation; therefore, the site is wholly non-commercial and non-profit in purpose. It is our understanding that the materials included on the NIEHS Kids' Pages were available to NIEHS for use on this site as covered under the standards for Fair Use established in Rose-Acuff Music v. Campbell.

Now let's play with some words...what do you see below?



In black you can read the word GOOD; but the word EVIL also appears in white letters inside each black letter.

## Now what do you see?



You may not see it at first, but the white spaces create the word OPTICAL, while the blue landscape spells out ILLUSION.

## And what do you see below?



This one is quite tricky!
but......
The word TEACH reflects as LEARN.
YOU!

# What do you see?



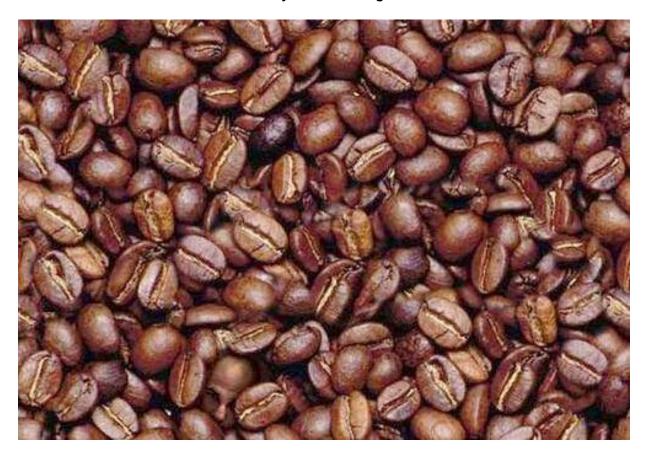
You probably read the word ME in brown,

when you look through ME - you will see

### The Man in the Coffee Beans

The "illusion" is that this is just a picture of coffee beans; but it is not. Can you find a man's face among the beans? Some say that if you find the man in 3 seconds or less, the right half of your brain may be more well developed than most.

PS: This is not a trick. A man's face is really hidden among the beans.



What is the Difference? - Games to challenge your observation skills.

Tips for creating "what's the difference" games:

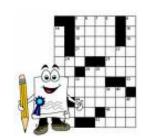
- Use photography software you are familiar with to create unique puzzles from photographs.
- Word processing software can be used to create puzzles using simple objects.
- Vary the game by using "hidden pictures."

### 4-H Twists

- Pictures from recent 4-H events can serve as discussion starters. Example: pictures from the first dog obedience practice can serve as a reminder that classes have begun.
- Pictures of annual 4-H events may promote the approach of an event. Example: pictures of last year's delegation to lowa Youth Conference can be used to promote registration for this year.
- Object pictures could be used to begin discussion on various project areas. Example: objects of foods which belong to certain food groups; hidden woodworking tools; farm safety dangers, etc.

#### **Cross Word Puzzles**

- Make your own cross word puzzle. One of many online options: http://www.puzzle- maker.com/CW/
- Graph paper and pencil challenge youth to create a cross word puzzle of their own
- Crossword software packages are abundant and easy to use



#### **Word Search Puzzles**

• Make your own word search puzzle. One online option: http://www.armoredpenguin.com/wordsearch/ This page allows you to create word search puzzles using your words. When you are done, hit the "Puzzle" button to generate a word search puzzle. Once the puzzle is displayed, you can use the "Printable HTML" or "Printable PDF" buttons to get a clean page suitable for printing with your web browser. The puzzle that is generated will remain on this server for about two months. If you want to ensure that you have a copy of the generated puzzle, make sure you save a copy.

## **Tangrams**

- Ancient Chinese moving piece puzzle, consisting of 7 geometric shapes.
- Funtivities Area kits contain sets of Tangram puzzles
- Simple Challenges create a square or triangle using all 7 puzzle pieces
- Create unique puzzles by outlining created shapes challenge others to recreate the outlined shape